

Please amend the claims as follows (this listing of claims replaces all prior versions):

1. (Currently Amended) A method for allocating channels, comprising:
 - receiving wireless messages that are in compliance with wireless communication standards, at least some of ~~different~~ the wireless messages complying with ~~different~~ a first wireless communication ~~standards~~ standard and at least some of the wireless messages complying with a second wireless communication standard that is different from the first wireless communication standard;
 - determining the wireless communication standards used by the received wireless messages;
 - determining available channels; and
 - dynamically allocating channels based on the available channels and the wireless communication standards used by the received messages to utilize wireless spectrum according to a current usage pattern.
2. (Previously Presented) The method of claim 1 further comprising:
 - sending instructions to use the channels.
3. (Previously Presented) The method of claim 2, wherein sending comprises sending instructions to a software-defined signal processing system to allocate the appropriate channels for the received messages.
4. (Original) The method of claim 1, wherein the spectrum of channels includes a channel dedicated to AMPS.
5. (Previously Presented) The method of claim 1, wherein one of the received messages is a call.

6. (Previously Presented) The method of claim 1, wherein one of the received messages is a message that is received through an antenna.

7. (Previously Presented) The method of claim 1, further comprising processing one of the received messages for transmission.

8. (Currently Amended) Apparatus for allocating channels, comprising:
a memory that stores executable instruction signals; and
a processor that executes the instruction signals to:

receive wireless messages that are in compliance with wireless communication standards, at least some of different the wireless messages complying with different a first wireless communication standards standard and at least some of the wireless messages complying with a second wireless communication standard that is different from the first wireless communication standard;

determine the wireless communication standards used by the received wireless messages;

determine available channels; and

dynamically allocate channels based on the available channels and the wireless communication standards used by the received messages to utilize wireless spectrum according to a current usage pattern.

9. (Previously Presented) The apparatus of claim 8 further comprising instructions to: send notifications to use the channels.

10. (Previously Presented) The apparatus of claim 9, wherein to send instructions comprises sending instructions to a software-defined signal processing system to allocate the appropriate channels for the received messages.

11. (Original) The apparatus of claim 8, wherein the spectrum of channels includes a channel dedicated to AMPS.

12. (Previously Presented) The apparatus of claim 8, wherein one of the received messages is a call.

13. (Previously Presented) The apparatus of claim 8, wherein one of the received messages is a message that is received through an antenna.

14. (Previously Presented) The apparatus of claim 8, wherein the processor processes one of the received messages for transmission.

15. (Currently Amended) An article comprising a machine-readable medium that stores executable instruction signals allocating channels, the instruction signals causing a machine to:

receive wireless messages in compliance with wireless communication standards, at least some of ~~different~~ the messages complying with ~~different~~ a first wireless communication ~~standards~~ standard and at least some of the messages complying with a second wireless communication standard that is different from the first wireless communication standard;

determine the wireless communication standards used by the received wireless messages;

determine available channels; and

dynamically allocate channels based on the available channels and the wireless communication standards used by the received messages to utilize wireless spectrum according to a current usage pattern.

16. (Previously Presented) The article of claim 15, further comprising instruction signals causing a machine to:

send notifications to use the channels.

17. (Previously Presented) The article of claim 16, wherein to send notification comprises sending instructions to a software-defined signal processing system to allocate the appropriate channels for the received messages.

18. (Original) The article of claim 15, wherein the spectrum of channels includes a channel dedicated to AMPS.

19. (Previously Presented) The article of claim 15, wherein one of the received messages is a call.

20. (Previously Presented) The article of claim 15, wherein one of the received messages is a message that is received through an antenna.

21. (Previously Presented) The article of claim 15, wherein the instruction signals cause the machine to process one of the received messages for transmission.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The apparatus of claim 8, wherein for each received message, the processor sends an instruction to allocate a channel dedicated to the communication standard for communicating with a mobile device that sent the message.

25. (Previously Presented) The apparatus of claim 24, wherein the processor sends an instruction to a software-defined signal processing device to send another message to the mobile device to use the allocated channel.

26. (Canceled)

27. (Previously Presented) The apparatus of claim 8, wherein the processor allocates channels dedicated to the communication standards associated with the messages.

28. (Canceled)

29. (Previously Presented) The apparatus of claim 8, wherein the processor determines frequencies licensed to a user of one of the messages.

30. (Previously Presented) The apparatus of claim 29, wherein the processor chooses from a list of available channels a channel that meets at least one of the frequency requirement or a bandwidth requirement.

31. (Previously Presented) The apparatus of claim 30, wherein the processor sends an instruction to a software-defined signal processing device to send another message to a mobile device to use the allocated channel.

32. (Previously Presented) The apparatus of claim 8, wherein the received messages comprise a short-message, text, a housekeeping signal, or intended consumer signals.

33. (Previously Presented) The apparatus of claim 14, wherein the message comprises a broadcast.

34. (Previously Presented) The apparatus of claim 33, wherein the processor sends an instruction to allocate a channel dedicated to the communication standard for communicating with a mobile device that receives the broadcast.

35. (Previously Presented) The apparatus of claim 33, wherein the processor sends an instruction to a software-defined signal processing device to send another message to the mobile device to use the allocated channel.

36. (Canceled)

37. (Canceled)

38. (Previously Presented) The apparatus of claim 39, wherein the processor allocates channels dedicated to the communication standards associated with the messages.

39. (Canceled)

40. (Currently Amended) Apparatus for allocating channels, comprising:

a memory that stores executable instructions; and

a processor that executes the instructions to implement:

receiving a first wireless message from a first wireless device and a second wireless message from a second wireless device, the first ~~and second~~ wireless device ~~device~~ complying with ~~either same or different~~ a first wireless communication standards standard and the second wireless device complying with a second wireless communication standard that is different from the first wireless communication standard; and

for each of the received first and second wireless messages,

determining the communication standard used by the received message,

determining available channels, and

dynamically allocating a channel based on the available channels and the communication standard used by the received first or second message to utilize wireless spectrum according to a current usage pattern.

41. (Canceled).

42. (Previously Presented) The apparatus of claim 40, further comprising executable instructions to implement: for each of the received first and second wireless messages, sending an instruction to a software-defined signal processing device to send another message to the first or second wireless device to use the corresponding allocated channel.

43. (Previously Presented) The apparatus of claim 40, further comprising executable instructions to implement: receiving additional wireless messages from additional wireless devices, at least some of the additional messages complying with different communication

standards, and dynamically responding to the additional wireless messages to utilize spectrum according to a current usage pattern.

44. (Currently Amended) A method for allocating channels, comprising:
receiving a first wireless message from a first wireless device and a second wireless message from a second wireless device, the first ~~and second~~ wireless device ~~device~~ complying with ~~either same or different a first~~ communication standards standard and the second wireless device complying with a second wireless communication standard that is different from the first wireless communication standard; and
for each of the received first and second wireless messages,
determining the communication standard used by the received message,
determining available channels, and
dynamically allocating a channel based on the available channels and the communication standard used by the received first or second message to utilize wireless spectrum according to a current usage pattern.

45. (Previously Presented) The method of claim 44, further comprising, for each of the received first and second wireless messages, sending an instruction to a software-defined signal processing device to send another message to the first or second wireless device to use the corresponding allocated channel.

46. (Currently Amended) The method of claim 1 in which dynamically allocating channels comprises dynamically allocating a first channel complying with [[a]] the first wireless communication standard or a second channel complying with [[a]] the second wireless communication standard depending on the communication standard used by the received message, the first and second channel overlapping in frequency.

47. (Currently Amended) The apparatus of claim 8 in which dynamically allocate channels comprises dynamically allocate a first channel complying with [[a]] the first wireless communication standard or a second channel complying with [[a]] the second wireless

communication standard depending on the communication standard used by the received message, the first and second channel overlapping in frequency.

48. (Currently Amended) The article of claim 15 in which dynamically allocate channels comprises dynamically allocate a first channel complying with [[a]] the first wireless communication standard or a second channel complying with [[a]] the second wireless communication standard depending on the communication standard used by the received message, the first and second channel overlapping in frequency.

49. (Currently Amended) The apparatus of claim 40 in which dynamically allocating a channel comprises dynamically allocating a first channel complying with [[a]] the first wireless communication standard or a second channel complying with [[a]] the second wireless communication standard depending on the communication standard used by the received message, the first and second channel overlapping in frequency.

50. (Currently Amended) The method of claim 44 in which dynamically allocating a channel comprises dynamically allocating a first channel complying with [[a]] the first wireless communication standard or a second channel complying with [[a]] the second wireless communication standard depending on the communication standard used by the received message, the first and second channel overlapping in frequency.

51. (New) The method of claim 1 in which dynamically allocating channels comprises determining an increase in the number of messages complying with the first wireless communication standard, increasing the number of channels allocated to the first wireless communication standard, and decreasing the number of channels allocated to the second wireless communication standard.

52. (New) The method of claim 1 in which each of the first and second wireless communication standards is selected from the group consisting of time division multiple access (TDMA), general packet radio service (GPRS), H.323, advance mobile phone service (AMPS),

global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA).

53. (New) The apparatus of claim 8 in which dynamically allocate channels comprises determine an increase in the number of messages complying with the first wireless communication standard, increase the number of channels allocated to the first wireless communication standard, and decrease the number of channels allocated to the second wireless communication standard.

54. (New) The apparatus of claim 8 in which each of the first and second wireless communication standards is selected from the group consisting of time division multiple access (TDMA), general packet radio service (GPRS), H.323, advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA).

55. (New) The article of claim 15 in which dynamically allocate channels comprises determine an increase in the number of messages complying with the first wireless communication standard, increase the number of channels allocated to the first wireless communication standard, and decrease the number of channels allocated to the second wireless communication standard.

56. (New) The article of claim 15 in which each of the first and second wireless communication standards is selected from the group consisting of time division multiple access (TDMA), general packet radio service (GPRS), H.323, advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA).

57. (New) The apparatus of claim 40 in which each of the first and second wireless communication standards is selected from the group consisting of time division multiple access (TDMA), general packet radio service (GPRS), H.323, advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA).

58. (New) The apparatus of claim 44 in which each of the first and second wireless communication standards is selected from the group consisting of time division multiple access (TDMA), general packet radio service (GPRS), H.323, advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA)